

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 August 2005 (11.08.2005)

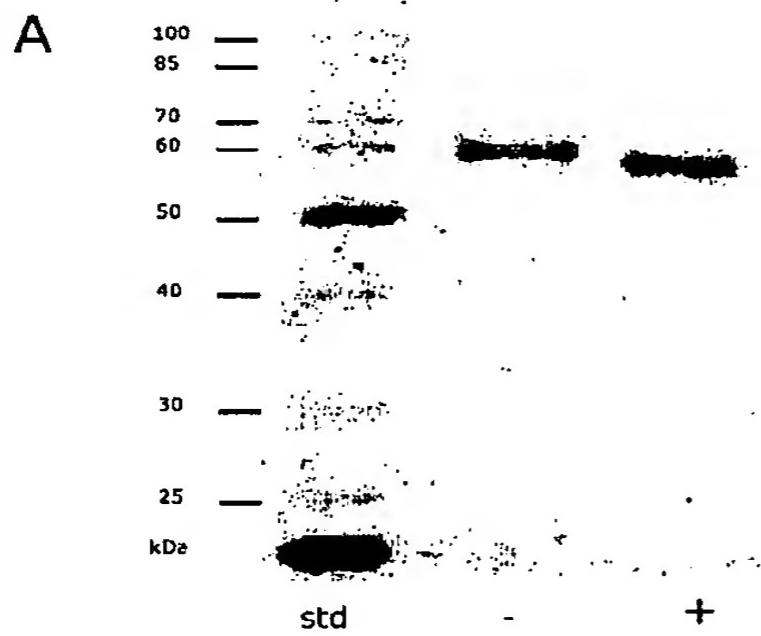
PCT

(10) International Publication Number
WO 2005/073367 A1

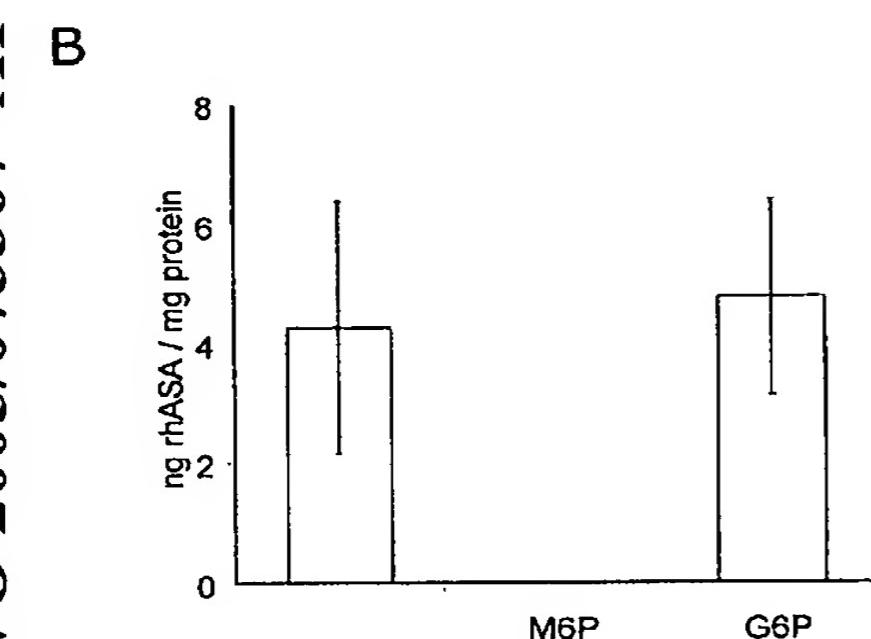
- (51) International Patent Classification⁷: C12N 9/16, A61K 38/46
- (21) International Application Number: PCT/DK2005/000068
- (22) International Filing Date: 30 January 2005 (30.01.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
PA 2004 00144 30 January 2004 (30.01.2004) DK
60/540,061 30 January 2004 (30.01.2004) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

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(54) Title: PRODUCTION AND PURIFICATION OF RECOMBINANT ARYLSULFATASE A



(57) **Abstract:** The present invention pertains to a process for production of recombinant arylsulfatase A in a cell culture system, the process comprising culturing a mammalian cell capable of producing rASA in liquid medium in a system comprising one or more bio-reactors; and concentrating, purifying and formulating the rASA by a purification process comprising one or more steps of chromatography. Other aspects of the invention provides a pharmaceutical composition comprising rASA, which is efficiently endocytosed via the mannose-6-phosphate receptor pathway *in vivo* as well as a rhASA a medicament and use of a rhASA for the manufacture of a medicament for reducing the galactosyl sulphatide levels within target cells in the peripheral nervous system and/or within the central nervous system in a subject. A final aspect of the invention provides a method of treating a subject in need thereof, said method comprising administering to said subject a pharmaceutical composition comprising a rhASA and thereby obtaining a reduction in the galactosyl sulphatide levels in target cells within said subject.



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